



MOBILE BRAIN/BODY IMAGING (MoBI) OF NATURAL SPATIAL COGNITION

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Recent years have shown a remarkable shift in using established EEG technologies outside traditional lab environments recording brain dynamics in actively behaving participants in complex technical setups or the real world. This shift in EEG research comes with new challenges regarding recording hardware and analyses approaches sometimes leading to difficulties in comparing the results with established laboratory EEG-parameters associated with cognitive processes. I will provide a short overview of the background of Mobile Brain/Body Imaging (MoBI) and will present results from MoBI-experiments investigating multisensory integration during spatial orientation and new approaches to investigating the neural basis of spatial cognition using VR technology. The presentation will discuss new insights gained from MoBI studies and issues of replicability of established neural parameters. Potential new insights from experiments investigating natural cognition including the use of the human physical structure in different task scenarios will be highlighted.

